

This is a preview - [click here to buy the full publication](#)

INTERNATIONAL STANDARD

**ISO/IEC/
IEEE
26513**

Second edition
2017-10

Systems and software engineering — Requirements for testers and reviewers of information for users

*Ingénierie des systèmes et du logiciel — Exigences pour testeurs et
vérificateurs de documentation utilisateur*



Reference number
ISO/IEC/IEEE 26513:2017(E)

© ISO/IEC 2017
© IEEE 2017



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2017, Published in Switzerland
© IEEE 2017

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from ISO, IEC or IEEE at the respective address below.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Institute of Electrical and Electronics Engineers, Inc
3 Park Avenue, New York
NY 10016-5997, USA

stds.ipr@ieee.org
www.ieee.org

Contents

Page

1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4	Conformance	9
4.1	Definition of conformance	9
4.2	Conformance situations	9
5	Review and assessment processes of user documentation within the software lifecycle	10
5.1	Process overview	10
5.2	Review and assessment activities	10
6	Documentation evaluation strategy	12
6.1	Requirements, objectives, and constraints	12
6.2	Documentation evaluation activities	13
6.3	Selection of an evaluation method	14
6.4	Documentation evaluation criteria	14
6.5	Documentation test process	14
6.6	Project requirements affecting documentation evaluation	15
6.7	Resource requirements and planning	15
6.7.1	General	15
6.7.2	Resources for documentation evaluation	16
6.7.3	Impact of evaluation on project schedules	16
7	Documentation evaluation methods and procedures	17
7.1	General	17
7.2	Documentation review	17
7.2.1	Planning documentation review	17
7.2.2	Administering quality review	19
7.2.3	Managing the results of documentation review	20
7.2.4	Configuration change review	20
7.3	System test of documentation	20
7.3.1	Creating the system test plan for documentation	22
7.3.2	System test plan for documentation approvals	23
7.3.3	Problem management and the system test of documentation lifecycle	23
7.4	Usability testing of documentation	23
7.4.1	General	23
7.4.2	Objectives and activities for usability testing of documentation	24
7.4.3	Measures and metrics for documentation usability testing goals	25
7.4.4	Planning documentation usability tests	25
7.4.5	Performing usability evaluation of documentation	27
7.4.6	Problem management for documentation usability tests	28
7.5	Accessibility testing of documentation	28
7.5.1	Scope of accessibility testing	28
7.5.2	Performing accessibility tests	29
7.6	Translation and localization review and testing	29
7.6.1	General	29
7.6.2	Planning for translation and localization review and testing	29
7.6.3	Performing translation and localization review and testing	29
Annex A (informative)	User-centered test and review guidelines	31
A.1	Support for an action-oriented approach	31
A.2	Support for real tasks	32
A.3	Support for error recognition and recovery	33

A.4 Support for information access	33
A.5 Content for translation	34
Bibliography.....	35

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. The IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and serve without compensation. While the IEEE administers the process and establishes rules to promote fairness in the consensus development process, the IEEE does not independently evaluate, test, or verify the accuracy of any of the information contained in its standards.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of ISO/IEC JTC 1 is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is called to the possibility that implementation of this document may require the use of subject matter covered by patent rights. By publication of this document, no position is taken with respect to the existence or validity of any patent rights in connection therewith. ISO/IEC and IEEE is not responsible for identifying essential patents or patent claims for which a license may be required, for conducting inquiries into the legal validity or scope of patents or patent claims or determining whether any licensing terms or conditions provided in connection with submission of a Letter of Assurance or a Patent Statement and Licensing Declaration Form, if any, or in any licensing agreements are reasonable or non-discriminatory. Users of this document are expressly advised that determination of the validity of any patent rights, and the risk of infringement of such rights, is entirely their own responsibility. Further information may be obtained from ISO or the IEEE Standards Association.

This document was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*, in cooperation with the Software & Systems Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This second edition of ISO/IEC/IEEE 26513 cancels and replaces ISO/IEC 26513:2009 which has been technically revised. The main changes compared to the previous edition are as follows:

- additions to the Terms and Definitions;
- updates to the Documentation Review and System Test of Documentation sections;
- expanded sections for Accessibility Testing and Translation and Localization Review and Testing;
- replacement of the editorial checklists in Annex A with User-centered Test and Review Guidelines;
- editorial changes; and
- additions to the bibliography.

Introduction

Well-designed documentation not only assists users and helps to reduce the cost of training and support, but also enhances the reputation of the product, its producer, and its suppliers. Verification, validation testing, and expert review of content during development provides feedback to information developers regarding the accuracy and usability of their work. This document addresses the evaluation and testing of information provided for users to perform tasks, make decisions in context, and gain understanding. It applies to both initial development and subsequent releases of the software and user documentation.

This document is independent of the software tools that may be used to produce documentation and applies to printed and electronic documentation, embedded content in the software, and online documentation. Much of its guidance is applicable to user documentation for systems including software user documentation as well as the software used to control machinery or hardware devices.

This document was developed to assist those who test and review software user documentation as part of the software lifecycle process. This document defines the information management and validation processes of ISO/IEC/IEEE 12207:2017 from the information assessors' and testers' standpoints. This document can be used as a conformance or a guidance document for products, projects, and organizations claiming conformance to ISO/IEC/IEEE 15288:2015 or ISO/IEC/IEEE 12207:2017. Readers are assumed to have experience with or general knowledge of reviewing and testing processes.

Systems and software engineering — Requirements for testers and reviewers of information for users

1 Scope

This document supports the interest of software users in receiving consistent, complete, accurate, and usable documentation and specifies processes for use in testing and reviewing of user documentation (Clause 6). It is not limited to the test and review stage of the lifecycle, but includes activities throughout the information management and documentation management process.

This document is intended for use in all types of organizations, whether or not a dedicated documentation department is present. In all cases, it can be used as a basis for local standards and procedures. Readers are assumed to have experience or general knowledge of testing or reviewing processes.

This document deals with the evaluation of end-user content only, and not with the evaluation of the software it supports.

NOTE 1 Documentation is also included in evaluation of the software product, as in the ISO/IEC 25000 and 29000 series of standards. In particular:

- ISO/IEC TR 25060;
- ISO/IEC 25062;
- ISO/IEC 25063:2014;
- ISO/IEC 25064:2013; and
- ISO/IEC/IEEE 29119-3:2013.

This document provides the minimum requirements for testing and reviewing user documentation (Clause 7), including both printed and online documents used in work and other environments by the users of software which includes application software, systems software, apps on mobile devices, and software that controls machinery or hardware devices. It applies to printed user manuals, online help, user assistance, tutorials, websites, and user reference documentation.

This document can also be helpful for testing and reviewing the following types of documentation:

- documentation of products other than software, for example, hardware or devices;
- multimedia systems using animation, video, and sound;
- tutorial packages and specialized course materials intended primarily for use in formal training programs;
- documentation produced for installers, computer operators, or system administrators who are not end users; and
- maintenance documentation describing the internal operation of systems software.

This document is applicable to testers, reviewers, and other related roles, including a variety of specialists:

- usability testers, documentation reviewers, and subject-matter experts;
- information developers and architects who plan the structure and format of products in a documentation set;
- usability analysts and business analysts who identify the tasks the intended users perform with the software;
- editors;
- test participants;
- installers, computer operators, or system administrators; and
- customer support groups such as training, help desks, repair, and return.

The document can also be consulted by those with other roles and interests in the information management process. Managers of the software development process or the information management process consider the testing of documentation as part of their planning and management activities. Project managers, in particular, have an important role in supporting the review and testing of documentation.

Testing of the documentation is likely to highlight any defects or nonconformances in tools that are used to create or display online documentation. Similarly, usability testing of the documentation is likely to identify additional operational concerns or misunderstandings of end users.

NOTE 2 Testing of documentation can highlight problems with the software being documented. Resolving problems with the software is not in the scope of this document.

There are other roles that need to understand the test processes for the documentation; for example, information developers should understand the test processes for the documentation that they have produced, and acquirers of documentation prepared by another department or organization might want to know what testing has been performed and the processes followed for the documentation that they are acquiring from a supplier.

The order of clauses in this document does not imply that software user documentation is meant to be reviewed, assessed, edited, or tested in this order.

In each clause, the requirements are media-independent, as far as possible. The informative guidelines found in *Annex A, User-Centered Test and Review Guidelines*, can be used at each stage of the information management process to verify that the correct steps have been carried out and that the finished product has acceptable quality.

The works listed in the Bibliography provide additional guidance on the processes of managing, preparing, and testing of user documentation.

2 Normative references

There are no normative references in this document.